Abstract

          A system (100) and method are provided for developing customized integrated circuits (ICs) for use in an external system (105) while connected to the external system. In one embodiment, the system (100) includes a development board (115) for holding an IC core (120), the board having several ports (125) for transmitting signals to and from the IC core. A computer (130) with hardware descriptor language (HDL) software running thereon, coupled to the development board to configure the IC core to form the IC. Interface software (180), also running on the computer (130), translates Register Transfer Level (RTL) code entered by a designer to code used by the HDL software, (180) includes program code for enabling the designer to (i) assign predetermined signals in the RTL code to predetermined ports (125); (ii) assign a clock speed for the IC core (120); determine if the IC core can operate at the assigned clock speed; (iii) designate the ports to be monitored; and (iv) designate an output to be recorded in a VCD file.